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FarmFacts

Produced by Saskatchewan Agriculture and Food and Saskatchewan Rural Development

Coriander *(Coriandrum sativum)* is a spice crop that belongs to the carrot family. It is an annual herb with an erect, branching stem growing to a height of about 2 feet. The fresh green herb is used in East Indian and Chinese cooking (where it is known as cilentro or chinese parsley). The fresh green herb possesses a peculiar and unattractive odor. Mature seeds have a pleasant and spicy aroma. Coriander powder is made from ground seeds and is used in flavouring all kinds of food products. Coriander is one of the main ingredients of curry powder and is used in the flavouring of gin.

There are two types of coriander. The large seeded type (diameter of 3 - 5 mm) is grown mostly in tropical countries. The smaller seeded type is produced in temperate regions and has a higher volatile oil content. Volatile oils are responsible for the aroma of coriander.

Coriander is a high risk crop. Cost of production is high and risk of losses from poor emergence, weed competition or shattering are high. It is therefore recommended to begin production with just a few acres and to obtain a contract.

Yields of over 2,000 pounds/acre have been reported in Manitoba. However, due to the delayed germinating characteristic of the seed, and related weed problems, 800 pounds/acre would be considered a good yield.

Adaptation

Coriander is essentially a heat-loving crop. It may be grown on a fairly wide range of soils, but is best adapted to well-drained loam and sandy-loam soils. The crop will mature in 90 - 100 days under average growing conditions. Coriander germinates very slowly and may take as long as 21 days for emergence. Therefore, it does not compete successfully with weeds, and should be planted only on clean land. Plants are susceptible to hot, drying winds during blossom, and flowers can be burned off under such conditions. Bees are beneficial to pollination.

Seeding

The recommended seeding rate for coriander is 15-20 pounds/acre. The 20 pound rate should be used with discer seeding. The crop requires more moisture for germination than most other common crops. Shallow seeding into moist soil will enhance germination and speed up plant emergence. The use of a press drill is highly recommended. The seeder should be adjusted so that it does not damage the seed. Although coriander has some tolerance to light frost, seeding should be delayed until the danger of spring frost has passed. The fruit of the coriander plants is nearly spherical and consists of two fused seeds. Before seeding the fruits must be rubbed to separate the two seeds.

Fertilizers

To date, no experimental work with fertilizers has been conducted to establish recommended rates for coriander. Growers have found that an application of 40-60 pounds of 23-23-0 per acre has helped to provide the additional nutrients required to produce a good crop.

Weed Control

The current varieties of coriander will emerge in 12-21 days after planting. This delay can result in severe weed competition unless the crop is grown on clean land. In general coriander response to herbicide is similar to that of carrot and caraway. Ethalfluralin (Edge DF) is the only registered herbicide for coriander. Ethalfluralin provides control of annual grasses (green and yellow foxtail, barnyard grass), volunteer wheat and annual broadleaves (kochia, wild buckwheat, redroot pigweed, lamb's-quarter, cow cockle, purslane, chickweed, corn spurry and prostrate pigweed). Consult the label to determine the rate of application.

Harvesting

Coriander may be swathed as soon as the pods turn brown. It is important to harvest when the crop is fully ripe to ensure that the unpleasant odor of the immature fruit has been replaced by the pleasant aroma of the ripe fruit. Swathing in damp weather or in the early morning when dew is present, will help to avoid losses through shattering. The moisture content should not be higher than 15% when combining the crop. All combining adjustments should be aimed at reducing damage to the seed. This will reduce the cylinder speed to about 500 r.p.m. under dry conditions. An initial concave setting of ½ inch at the front, and ¼ inch at the back is suggested. Wind speed should be kept quite low, and return of seed to the cylinder should be minimized as much as possible. Coriander containing over 5% splits is usually discounted at time of purchase.

Supply and Demand

Industry, Science, and Technology Canada reports a total of 120,000 kg whole seed and 27,000 kg crushed or ground coriander was imported into Canada in 1988.

Prices

The *Chemical Marketing Reporter* is one of the most thorough sources of spice price data. It reports weekly New York spot prices. Spot prices tend to be higher than those obtained from direct overseas suppliers because spot markets are only used when supplies are required immediately.

As well, the U.S.D.A. Foreign Agricultural Service publication, *Teas Spices and Essential Oils* reports annual spice price summaries.

Prices for coriander have ranged from 19 cents per pounds to 30 cents per pound (U.S.$ Toronto).

Markets

Competition is from Moroccan and Romanian coriander. Canadian coriander production must concentrate on high quality and consistent seed size to penetrate markets. A grower should obtain a contract with a broker or marketing company if at all possible.

Sources of Information

A listing of current spice brokers and millers is available from:

Canadian Spice Association
Box 189
Don Mills, Ontario
M3C 2S2

and

American Spice Association, Inc.
Box 1267
Englewood Cliffs, New Jersey
07632 USA

February, 1990
Deanne Belisle

3M 02/90 ISSN 0840-9447